

REMARKS

In the Official Action mailed 03 March 2010, the Examiner reviewed claims 2, 5 and 7-18. The Examiner has rejected claim 2 under 35 U.S.C. §112, second paragraph; and has rejected claims 2, 5 and 7-18 under 35 U.S.C. §102(b).

Applicant has added new claims 19-21, canceled claims 2, 5 and 7-10 and 13-18, amended claims 11 and 12. Claims 11, 12 and 19-21 are now pending.

Each rejection is respectfully traversed below.

Rejection of Claim 2 under 35 U.S.C. §112, Second Paragraph

The Examiner has rejected claim 2 under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 2 is canceled.

Rejection of Claims 2, 5 and 7-18 under 35 U.S.C. §102(b)

The Examiner has rejected claims 2, 5 and 7-18 under 35 U.S.C. §102(b) as being anticipated by Kannan *et al. A Methodology and Algorithms for Post-Placement Delay Optimization*, ACM, 31st ACM/IEEE Design Automation Conference, 1994, pp. 327-332.

Independent claim 2 has been canceled and new independent claim 19 added. Claims 11 and 12 are amended to depend from claim 19. All other dependent claims were canceled.

Reconsideration of the rejection of claims 11 and 12 as amended is respectfully requested.

New Claims 19-21

New claims 19 - 21 are added. In the following table, page and line number citations to the application as filed are provided for each limitation in the new claims.

NEW CLAIMS	SUPPORT IN APPLICATION AS FILED (page:line)
19. An automated method for designing an integrated circuit layout with a computer, comprising:	p. 18:11-15
selecting cells from a cell library to implement a circuit path;	p. 31:9-12

prior to placement of the circuit path, determining initial delay values for the selected cells based on corresponding preferred gains of the selected cells;	p. 21:8-10, p. 22:21 - p. 24:7
prior to placement of the circuit path, determining an adjusted initial delay value for at least one of the selected cells by performing at least one of:	p. 48:19-21
compressing the initial delay value of at least one of the selected cells to meet delay constraints for the circuit path, and	p. 49:4-9
stretching the initial delay value of at least one of the selected cells to reduce slack in the circuit path;	p. 49:10-17
performing a placement of the selected cells for the circuit path, including assigning wire loads to the selected cells;	p. 54:16 et seq.; p. 56:8-12 (“wire load” corresponds to “net length.” See, p. 57:1-12)
adjusting size or area of one or more of the selected cells during or after placement in response to the assigned wire loads, to maintain the initial delay value or the adjusted initial delay value for the corresponding selected cells; and	p. 56:6-8; p. 56:13-15 and p. 57:1-12
routing the selected cells for the circuit path.	p. 57:13-18
20. The automated method of claim 19, including prior to placement, inserting a buffer in the circuit path if there is available slack in the circuit path.	p. 45:12-44

21. The automated method of claim 20, including prior to placement, determining net weight values for the selected cells, the net weight values representing sensitivity of total area of a circuit design to load on corresponding cells, and determining whether to insert a buffer on the output of a given cell in the selected cells using the net weight value of the given cell.	p. 46:21 - p. 47:3
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As discussed in the Examiner Interview summarized above, Kannan *et al.* does not teach a process similar to that recited in new claims 19-21.

Withdrawal of Terminal Disclaimers

Applicants IBM and Synopsys are filing a petition herewith to withdraw the Terminal Disclaimers submitted in connection with the canceled claims on 13 April 2009, as the basis for submission of them is no longer applicable to the claims of record.

In connection with the issue of obviousness type double patenting, Applicant directs the Examiner's attention to claims 12-15, 28-30, 50 and 52 of parent US Patent No. 6,453,446 and to claims 12-16 of parent US Patent No. 6,725,438 which address the "stretching" and "compressing" technology. It can be seen for example, that the claims in the parent application do not recite that stretching or compressing be used to adjust the initial delay values "prior to placement" as stated in the current claims, and as specifically stated in the application as filed at the bottom of page 48.

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CONCLUSION

It is respectfully submitted that this application is now in condition for allowance, and such action is requested.

The Commissioner is hereby authorized to charge any fee determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (SYNP 1006-0).

Respectfully submitted,

Dated: 06 July 2010

/Mark A. Haynes/

Mark A. Haynes, Reg. No. 30,846

SYNOPSYS, INC.
c/o HAYNES BEFFEL & WOLFELD LLP
P.O. Box 366
Half Moon Bay, CA 94019
(650) 712-0340 phone
(650) 712-0263 fax